WEST Search History

Hide liems Restore Clear Cancel

DATE: Monday, October 02, 2006

Hide? Set Name Query

Hit Count

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=NO; OP=ADJ `

L2 de-19640618-\$.did. or de-19628700-\$.did. or ep-630892-\$.did.

4

END OF SEARCH HISTORY

```
2004:20679 CAPLUS
     140:77358
DN
ED
     Entered STN: 11 Jan 2004
     Synthesis of glycal derivs. for use as chiral dopants for liquid crystal
TΙ
     systems or in dispersions, emulsions, coating films, or pigments
IN
     Parker, Robert; Prechtl, Frank; Haremza, Sylke; Meyer, Frank; Vill,
                                                        this applicate
     Volkmar; Gesekus, Gunnar
     Basf Aktiengesellschaft, Germany
PA
SO
     PCT Int. Appl., 28 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     German
     ICM C07D309-00
IC
CC
     33-2 (Carbohydrates)
     Section cross-reference(s): 75
FAN.CNT 1
     PATENT NO.
                                          APPLICATION NO.
                        KIND
                               DATE
                                                                 DATE
     --------
                        ----
                               -----
                                          -----
                                                                 -----
     WO 2004002979
                        A2
                               20040108
                                         WO 2003-EP6885
                                                                20030630
     WO 2004002979
                        A3
                               20040422
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
            PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
            TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    DE 10229530
                         A1
                               20040115
                                        DE 2002-10229530
                                                               20020701
    AU 2003250860
                         A1
                               20040119
                                         AU 2003-250860
                                                                 20030630
                                         EP 2003-761553
     EP 1519931
                        A2
                               20050406
                                                                20030630
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP 2005538969
                        T2
                               20051222
                                         JP 2004-516745
                                                               20030630
     CN 1735606
                         Α
                               20060215
                                          CN 2003-815407
                                                                 20030630
                        A1
     US 2005230660
                                          US 2004-518389
                               20051020
                                                                 20041230
PRAI DE 2002-10229530
                        Α
                               20020701
    WO 2003-EP6885
                        W
                               20030630
CLASS
PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
                       ______
WO 2004002979
                ICM
                       C07D309-00
                IPCI
                       C07D0309-00 [ICM,7]
                       C07D0309-00 [I,C*]; C07D0309-30 [I,A]
                TPCR
                ECLA
                       C07D309/30
                       C07D0309-16 [ICM,7]; C07D0309-00 [ICM,7,C*];
DE 10229530
                IPCI
                       C09K0019-34 [ICS,7]
                IPCR
                       C07D0309-00 [I,C*]; C07D0309-30 [I,A]
                ECLA
                       C07D309/30
                       C07D0309-00 [ICM,7]
AU 2003250860
                IPCI
                IPCR
                       C07D0309-00 [I,C*]; C07D0309-30 [I,A]
EP 1519931
                IPCI
                       C07D0309-30 [ICM,7]; C07D0309-00 [ICM,7,C*]
                IPCR
                       C07D0309-00 [I,C*]; C07D0309-30 [I,A]
JP 2005538969
                IPCI
                       C07D0309-30 [ICM,7]; C07D0309-00 [ICM,7,C*];
                       C09K0019-54 [ICS,7]; C07M0007-00 [ICS,7]
                FTERM
                       4C062/BB14; 4H027/BA01; 4H027/BA02; 4H027/BA04;
                       4H027/BD16
CN 1735606
                IPCI
                       C07D0309-30 [I,A]; C07D0309-00 [I,C*]; C09K0019-58
                       [I,A]; C09K0019-34 [I,A]
                ECLA
                       C07D309/30
US 2005230660
                IPCI
                       C09K0019-58 [ICM,7]; C07D0039-16 [ICS,7]
                IPCR
                       C07D0309-00 [I,C*]; C07D0309-30 [I,A]
```

AN

252/299.200; 252/299.500; 549/200.000 NCL os MARPAT 140:77358 AB The invention relates to chiral 3,4-dihydro-2H-pyran compds., to diastereomers thereof, and to the use of these compds. as chiral dopants for liquid crystal systems (no data). The invention also relates to non-polymerizable or polymerizable liquid crystal compns., which contain at least one inventive chiral 3,4-dihydro-2H-pyran compound, to the use of these non-polymerizable or polymerizable liquid crystal compns. for producing optical components, to the use of the polymerizable liquid crystal compns. for imprinting or coating substrates, for producing dispersions and emulsions, films or pigments, and to these optical elements, imprinted or coated substrates, dispersions and emulsions, films and pigments (no Thus, D-xylal and D-arabinal were prepared in three steps from their parent sugars by acetylation, regioselective dehydrative deacetylation of the 1,2 positions, and deacylation to give the free hydroxy forms of both The free glycal could then be reacted with, e.g., glycals. H3C(CH2)6O-4-C6H4-4-C6H4C(O)Cl to give the title compds. of interest. glycal prepn liq crystal dopant dispersion emulsion coating pigment; sugar dehydrative deacetylation prepn glycal. IT Deacetylation (dehydrative; preparation of glycal derivs. for use as chiral dopants for liquid crystal systems or in dispersions, emulsions, coating films, or pigments) Carbohydrates, preparation ΙT RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (glycals; preparation of glycal derivs. for use as chiral dopants for liquid crystal systems or in dispersions, emulsions, coating films, or pigments) IT Coating materials Disperse systems Dopants Emulsions Liquid crystals Pigments, nonbiological (preparation of glycal derivs. for use as chiral dopants for liquid crystal systems or in dispersions, emulsions, coating films, or pigments) IT 58-86-6, D-Xylose, reactions 98-88-4, Benzoyl chloride 99-96-7, 4-Hydroxybenzoic acid, reactions 100-07-2, 4-Methoxybenzoic acid chloride 111-83-1, 1-Bromooctane 10323-20-3, D-Arabinose 27914-73-4 59748-17-3 65355-31-9 RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of glycal derivs. for use as chiral dopants for liquid crystal systems or in dispersions, emulsions, coating films, or pigments) 496-62-8P 3152-43-0P IT 496-61-7P 2493-84-7P 3945-17-3P 4049-33-6P 19186-37-9P 28547-23-1P 58860-84-7P 640723-52-0P 640723-53-1P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of glycal derivs. for use as chiral dopants for liquid crystal systems or in dispersions, emulsions, coating films, or pigments) IT 640723-51-9P 640723-54-2P 640723-55-3P 640723-56-4P 640723-57-5P 640723-58-6P 640723-59-7P 640723-60-0P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of glycal derivs. for use as chiral dopants for liquid crystal systems or in dispersions, emulsions, coating films, or pigments) IT 640723-52-0P 640723-53-1P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of glycal derivs. for use as chiral dopants for liquid crystal

systems or in dispersions, emulsions, coating films, or pigments)

D-threo-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis[4-(acetyloxy)benzoate]

RN

CN

640723-52-0 CAPLUS

(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 640723-53-1 CAPLUS

CN D-erythro-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis[4-(acetyloxy)benzoate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 640723-51-9P 640723-54-2P 640723-55-3P

640723-56-4P 640723-57-5P 640723-58-6P

640723-59-7P 640723-60-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of glycal derivs. for use as chiral dopants for liquid crystal systems or in dispersions, emulsions, coating films, or pigments)

RN 640723-51-9 CAPLUS

CN D-threo-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis[4-(benzoyloxy)benzoate] (9CI) (CA INDEX NAME)

RN 640723-54-2 CAPLUS

CN D-threo-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis[4'-(heptyloxy)[1,1'-biphenyl]-4-carboxylate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 640723-55-3 CAPLUS

CN D-threo-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis[4-(trans-4-heptylcyclohexyl*)benzoate] (9CI) (CA INDEX NAME)

RN 640723-56-4 CAPLUS

CN D-threo-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis(4-methoxybenzoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 640723-57-5 CAPLUS

CN D-threo-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis(4-hydroxybenzoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 640723-59-7 CAPLUS
CN D-erythro-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis(4-hydroxybenzoate)
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 640723-60-0 CAPLUS
CN D-erythro-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis[4-[[4-(octyloxy)benzoyl]oxy]benzoate] (9CI) (CA INDEX NAME)

```
'AN
     1988:549882 CAPLUS
DΝ
     109:149882
ED
     Entered STN: 28 Oct 1988
     Benzyl ethers of D- and L-arabinals as chiral synthons in organic
TI
     synthesis
AU
     Tolstikov, A. G.; Khakhalina, N. V.; Spirikhin, L. V.
     Inst. Chem., Ufa, USSR
CS
     Synthesis (1988), (3), 221-2
SO
     CODEN: SYNTBF; ISSN: 0039-7881
DT
     Journal
     English
LA
CC
     33-2 (Carbohydrates)
     CASREACT 109:149882
os
GI
PhCH<sub>2</sub>O
          OCH<sub>2</sub>Ph
AB
     Acidic opening of benzyl ethers of D- and L-arabinal catalyzed by HgSO4 is
     a key step in the preparation of chiral synthons with selectively substituted
     OH groups. Thus, benzylation of D-arabinal with PhCH2Cl gave 95%
     di-O-benzyl derivative I, which was treated with HgSO4 and H2SO4 in dioxane to
     give 65% (4S)-HOCH2CH(OCH2Ph)CH:CHCHO. The latter on sequential Wittig
     reaction with Ph3P:CHCO2Et, O-tosylation, and catalytic hydrogenation gave
     (6S) -TsOCH2CH (OH) (CH2) 4CO2Et (Ts = tosyl).
ST
     benzylarabinal chiral synthon; arabinal benzyl chiral synthon
IT
     Synthons
        (chiral, benzylarabinals, for organic synthesis)
IT
     1099-45-2
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (Wittig reaction of, with (benzyloxy) hydroxypentenal)
IT
     116556-76-4P
                    116556-77-5P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and Wittig reactions of)
IT
     116556-82-2P
                   116556-83-3P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and hydrogenation of)
     116661-76-8P 116661-77-9P
IT
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and ring cleavage of)
IT
     116556-80-0P
                   116556-81-1P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and tosylation of)
IT
                   116556-79-7P 116556-84-4P
     116556-78-6P
                                                   116556-85-5P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of)
```

IT

IT

IT

6228-47-3

RL: RCT (Reactant); RACT (Reactant or reagent)

RL: RCT (Reactant); RACT (Reactant or reagent)

496-61-7 3945-18-4, L-Arabinal

(O-benzylation of)

116661-76-8P 116661-77-9P

(reaction of, with butyllithium and (benzyloxy) hydroxypentenal)

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and ring cleavage of)
RN 116661-76-8 CAPLUS
CN D-erythro-Pent-1-enitol, 1,5-anhydro-2-deoxy-3,4-bis-O-(phenylmethyl)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 116661-77-9 CAPLUS
CN D-erythro-Pent-4-enitol, 1,5-anhydro-4-deoxy-2,3-bis-O-(phenylmethyl)(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

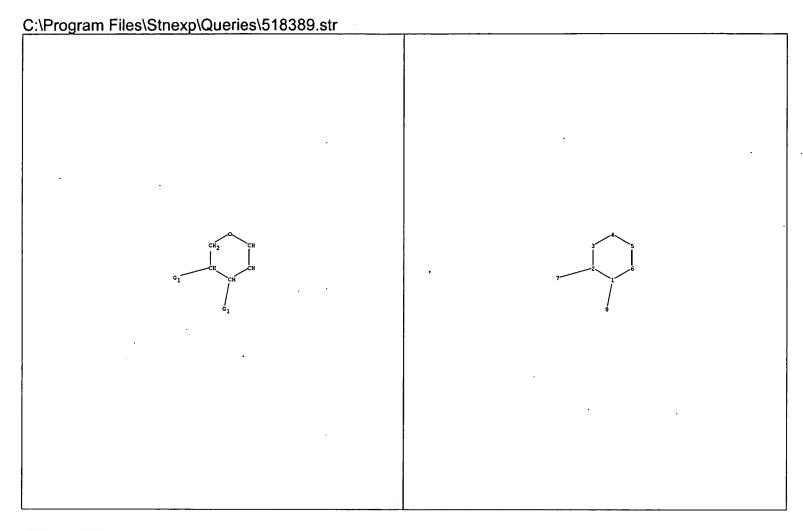
(methoxymethylation of)

IT

496-62-8P

L7 ANSWER 41 OF 46 CAPLUS COPYRIGHT 2006 ACS on STN 1988:455124 CAPLUS AN DN 109:55124 Entered STN: 19 Aug 1988 ED Synthesis of 2-deoxy-2-iodoglycosyl phosphoramidates ΤI ΑU Lafont, Dominique; Descotes, Gerard CS Lab. Chim. Org., Univ. Lyon I, Villeurbanne, F-69622, Fr. Carbohydrate Research (1987), 166(2), 195-209 SO CODEN: CRBRAT; ISSN: 0008-6215 DTJournal LA French CC 33-7 (Carbohydrates) os CASREACT 109:55124 Addition of IN3 to acetylated, benzylated, and methoxymethylated glycals yielded 2-deoxy-2-iodoglycosyl azides and 1,2-trans configuration. Stereoselectivity of the reaction favored the manno and talo configurations starting from D-glucal and D-galactal, resp. With D-xylal derivs., the stereoselectivity depended on the nature of the substituents. The Staudinger reaction of 2-deoxy-2-iodoglycosyl azides with P(OMe)3 led to the 2-deoxy-2-iodoglycosyl phosphoramidates in high yield. ST glycal iodine azide stereochem; deoxyiodoglycosyl azide prepn phosphorylation; phosphoramidate deoxyiodoglycosyl IT Stereochemistry (of azidation of glycals with iodine azide) IT Carbohydrates and Sugars, reactions RL: RCT (Reactant); RACT (Reactant or reagent) (glycals, reaction of, with iodine azide, stereochem. of) IT 13265-84-4 RL: RCT (Reactant); RACT (Reactant or reagent)

```
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and benzylation of)
IT
     115220-91-2P
                    115220-92-3P
                                   115220-93-4P
                                                   115220-94-5P
                                                                  115220-96-7P
     115220-97-8P
                    115220-98-9P
                                   115220-99-0P
                                                   115221-00-6P
                                                                  115221-01-7P
     115221-02-8P
                    115221-03-9P
                                   115221-04-0P
                                                   115221-05-1P
                                                                  115221-06-2P
     115221-07-3P
                    115221-08-4P
                                   115221-09-5P
                                                   115221-10-8P
                                                                  115221-11-9P
                    115221-13-1P
     115221-12-0P
                                   115221-14-2P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and phosphorylation of)
IT
     115220-82-1P
                    115220-83-2P
                                   115220-84-3P
                                                   115268-25-2P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and reaction of, with iodine azide, stereochem. of)
                    115220-86-5P
                                   115220-87-6P
IT
     115220-85-4P
                                                   115220-88-7P
                                                                  115220-89-8P
     115220-90-1P
                    115220-95-6P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of)
                 3152-43-0
                                                       80040-79-5
IT
     2873-29-2
                             4098-06-0
                                          55628-54-1
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with iodine azide, stereochem. of)
IT
     115220-82-1P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and reaction of, with iodine azide, stereochem. of)
RN
     115220-82-1 CAPLUS
CN
     D-threo-Pent-1-enitol, 1,5-anhydro-2-deoxy-3,4-bis-O-(phenylmethyl)- (9CI)
       (CA INDEX NAME)
```



chain nodes:

7 8

ring nodes:

1 2 3 4 5 6

chain bonds:

1-8 2-7

ring bonds:

1-2 1-6 2-3 3-4 4-5 5-6

exact/norm bonds:

1-2 1-6 1-8 2-3 2-7 3-4 4-5 5-6

G1:C,O,S,N

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS8:CLASS